

STATUS OF SOME SPECIES NAMES OF EUCERINE BEES (HYMENOPTERA: APOIDEA) PROPOSED BY LEPELETIER IN 1841¹

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ABSTRACT: The purpose of this work is to make known the existence of Lepeletier types of American eucerine bees, selection of lectotypes of three species and designate the synonymy of these four names with American species of *Melissodes* and *Florilegus*. *Macrocera philadelphica* Lepeletier and *M. pensylvanica* Lepeletier are synonymized with *Melissodes agilis* Cresson, *Macrocera americana* Lepeletier is synonymized with *Melissodes desponsa* Smith, and *Macrocera cajennensis* Lepeletier is synonymized with *Florilegus festinus* (Smith).

This paper is the result of the discovery of type material of four eucerine bees described by Lepeletier in 1841 in the Latreille-Dejean-Lepeletier material in the Hope Entomological Collection of the University Museum at Oxford, England, by D. B. Baker. These specimens are all in poor or very poor condition and Mr. Baker could not determine them to species using modern references (LaBerge, 1956, 1961; Mitchell, 1962). Mr. Baker kindly loaned the material to the author for study and comparison with fresh material available in the collections of the Illinois Natural History Survey. Lepeletier (1841, pp. 92, 94, 97 and 110) placed these four names in the genus *Macrocera*. LaBerge (1961, p. 654) considered them to be *nomina dubia*, since the types were unknown to him and were not discovered during a visit to Europe in 1957 including a visit to the Hope Collection.

Of the four species named by Lepeletier, one (*Macrocera pensylvanica*) was described from a single male specimen and that specimen was labeled as holotype by Mr. Baker. Three species were described from at least two specimens each and I have chosen the least damaged and most recognizable specimen as the lectotype for each name and so labeled it. Three of the Lepeletier names should be placed in the genus *Melissodes* and the fourth in the genus *Florilegus*. The names *pensylvanica* and *philadelphica* are both synonymous with *Melissodes agilis* Cresson and the name *americana* is synonymous with *Melissodes desponsa* Smith, whereas the name *cajennensis* is synonymous with *Florilegus festinus* (Smith). The resulting synonymies are given below.

¹ Received June 23, 1994. Accepted July 5, 1994.

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1. *Melissodes pensylvanica* (Lepeletier), 1841, (NEW COMBINATION).

Macrocera pensylvanica (sic) Lepeletier, 1841. Hist. Nat. Ins. Hymen., 2:97.

Macrocera philadelphica Lepeletier, 1841, *supra cit.*, 2:110 (NEW SYNONYMY).

Melissodes Agilis Cresson, 1878, Proc. Acad. Nat. Sci. Philadelphia, 30:204 (NEW SYNONYMY).

The male holotype of *pensylvanica* is in delicate condition. It has been hollowed out by dermestid larvae, the face eaten away and the left antenna missing. The legs and wings are complete and the right antenna partially eaten away. The metasoma and mesosoma appear to be complete.

The lectotype male of *philadelphica* has also been damaged by dermestid larvae which entered through the posterior part of the mesosoma so that most of the propodeum and metanotum and the legs of the right side are missing. Also missing are the antennae and the right compound eye. The remainder of the bee is intact and most key characters are visible. The other syntype available of *philadelphica* is lacking a metasoma, most of the prosoma and most of the appendages.

2. *Melissodes americana* (Lepeletier), 1841 (NEW COMBINATION)

Macrocera americana Lepeletier, 1841, *supra cit.* 2:92.

Melissodes desponsa Smith, 1854, Cat. Hymen. British Mus., Pt. 2, Apidae, p. 310 (NEW SYNONYMY)

The lectotype male of *americana* has had a dermestid larva enter its thorax through the ventral part between the hind coxae. The left leg is missing and the left femur half eaten away but still intact. All legs have lost at least the last two or all of the disitarsi and only the scape remains of the left antenna. The rest of the specimen is in fair shape and there can be no doubt about its identity. The second syntype of *americana* is in much worse condition and cannot be easily recognized.

3. *Florilegus cajennensis* (Lepeletier), 1841 (NEW COMBINATION).

Macrocera cajennensis Lepeletier, 1841, *supra cit.* 2:94.

Teralonia festiva Smith, 1854, Cat. Hymen. British Mus., Part 2, p. 304 (NEW SYNONYMY).

Florilegus festivus, Moure and Micheneer, 1955, Dusenla, 6:270.

The male lectotype of *cajennensis* has a complete head, thorax, legs and wings but lacks all but the basal tergum of the metasoma. The second specimen of *cajennensis* referred to me by Mr. Baker is a female specimen and the hind leg (right leg missing) is provided with abundant dark scopal hairs. This specimen is not part of the type series, as Lepeletier did not describe the

Two of the above species, *M. agilis* Cresson and *M. desponsa* Smith, are very common species in eastern North America and these names have been applied many times in the literature for more than 130 years. The Lepeletier names, on the other hand, have not been applied to any species since their description in 1841 with one exception. Dr. G. O. Hendrickson (1930) lists *Melissodes pennsylvanicus* Lep. in his work on the insect fauna of Iowa prairies. The bees involved were probably named for him by Grace Sandhouse of the Division of Insect identification of the U. S. Bureau of Entomology who is mentioned in the acknowledgments of Hendrickson's paper. Considering these circumstances, the author will apply to the International Commission on Zoological Nomenclature to preserve the junior synonyms and to reject and make unavailable the senior synonyms (the Lepeletier names) which apply to the two *Melissodes*. The last species listed above, *Florilegus cajennensis* (Lepeletier), should retain the senior synonymy since the junior synonym *festivus*) has been used only a few times in the literature in recent years.

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